EE 483 Communications Systems I Homework Set 9

- 1. (25/100) Exercise 1.12 from your Textbook. Recall that the Fourier transform of the triangular pulse $\operatorname{triang}(t) \triangleq \Lambda(t) = \begin{cases} t+1, & -1 \leq t < 0 \\ -t+1, & 0 \leq t < 1 \\ 0, & \text{otherwise.} \end{cases}$ is $\operatorname{sinc}^2(f)$.
- 2. (5/100) What is the mean of a random variable that is uniformly-distributed between [-1 1]?